

CLAIMS:

1. A method of fulfilling a request on a trading network comprised of a plurality of trading partners, comprising the steps of:
 - (a) sending a request to at least one trading partner, whereby the request is sent only to trading partners chosen by a trading rule;
 - (b) receiving at least one response to the request from the at least one trading partner;
 - (c) ranking the at least one responses according to an evaluation rule; and
 - (d) accepting one of the at least one responses.

10 2. The method of claim 1, wherein the request is a purchase request and the response is an offer to sell.

3. The method of claim 1, wherein the request is a sale request and the response is an offer to buy.

15 4. The method of claim 1, wherein the at least one response is automatically generated by a trading partner.

5. The method of claim 1, wherein step (d) additionally comprises automatically accepting 20 the highest ranked response.

6. The method of claim 1, wherein step (d) additionally comprises presenting the ranked responses to a user, and accepting the user's choice of responses.

7. The method of claim 1, wherein the trading rule takes into account whether the partner is a preferred trading partner.

8. The method of claim 7, wherein the determination of whether a trading partner is a
5 preferred trading partner is made by using a list of predetermined trading partners.

9. The method of claim 1, wherein the trading rule is based on a minimum preferred partner
score.

10 10. The method of claim 1, wherein the trading rule takes into account whether the partner
primarily sells a certain brand of products.

11. The method of claim 1, wherein the trading rule takes into account whether the partner is
located within a certain geographical area.

15 12. The method of claim 11, wherein the geographical area is defined by a list of regions.

13. The method of claim 12, wherein the list of regions is a list of counties.

20 14. The method of claim 11, wherein the geographical area is defined by a point and radius
around the point.

15. The method of claim 1, wherein the trading rule takes into account whether the partner
has an acceptable delivery record.

16. The method of claim 1, wherein the evaluation rule is based on price.
17. The method of claim 1, wherein the evaluation rule is based on promised delivery date.
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18. The method of claim 1, wherein the evaluation rule is based on acceptable delivery record.
19. The method of claim 1, wherein the evaluation rule is based on brand.
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20. The method of claim 1, wherein the evaluation rule is comprised of at least two criteria, and step (c) comprises using a weighted sum of the at least two criteria to rank the offers.
21. The method of claim 1, wherein the trading rule is based on at least two partner criteria,
15 and step (a) comprises sending a request to at least one trading partner, whereby the request is only sent to trading partners that meet the rule based on all partner criteria.
22. The method of claim 1, wherein the trading rule is comprise of at least two partner criteria, and step (a) comprises sending a request to at least one trading partner, whereby the
20 request is sent to trading partners that meet the rule based on any of the at least two partner criteria.

23. The method of claim 1, wherein step (c) comprises ranking the at least one responses according to a first evaluation rule, and if no single response is ranked highest, ranking the at least one responses again by a second evaluation rule.

5 24. The method of claim 23, additionally comprising ranking the at least one responses again by a third evaluation rule.

25. The method of claim 1, additionally comprising the step of:
(e) receiving a confirmation of the accepted response.

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26. A method for a node in a trading network to respond to a request for a specified quantity of specified goods, comprising the steps of:

(a) receiving a request;
(b) determining whether to respond to the request according to a trading rule;

15 (c) generating a response according to said determination, wherein said response includes at least one node preference; and

(d) responding to the request with the response generated in step (c).

27. The method of claim 26, wherein said request is a purchase request, and said response is
20 an offer to sell.

28. The method of claim 26, wherein said request is a sale request, and said response is an offer to buy.

29. The method of claim 26, wherein the trading rule is based on having a specified number of the specified goods remaining in inventory if the request is fulfilled.

30. The method of claim 26, wherein the trading rule is based on the node making the
5 request being a preferred trading partner.

31. The method of claim 26, wherein the trading rule is based on the node making the request having an acceptable credit record.

10 32. The method of claim 26, wherein the trading rule is based on the node making the request having an acceptable payment history with the node responding to the request.

33. The method of claim 26, wherein the at least one preference includes determining a markup specific to the node making the request.

15 34. The method of claim 26, wherein the at least one preference includes selling an identified brand.

35. A method for a requesting node to determine which of a plurality of offers to accept,
20 comprising the steps of:
(a) receiving a plurality of offers;
(b) ranking said offers using an evaluation rule; and
(c) determining whether to accept an offer.

36. The method of claim 35, additionally comprising accepting an offer sending an acceptance message to the trading partner that sent the accepted offer.

37. The method of claim 35, wherein the offers are offers to sell.

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38. The method of claim 35, wherein the offers are offers to buy.

39. The method of claim 35, wherein said evaluation rule includes ranking an offer with an identified brand higher than offers with any other brand.

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40. The method of claim 35, wherein said evaluation rule includes ranking the offer with the lowest price the highest.

41. The method of claim 35, wherein said evaluation rule includes setting a maximum

15 number of offers to evaluate, and step (b) comprises ranking offers until the maximum number of offers has been received.

42. The method of claim 35, wherein said evaluation rule includes ranking only offers that complete an entire request.

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43. The method of claim 35, wherein step (c) comprises determining the highest ranked offer and automatically accepting the highest ranked offer.

44. The method of claim 35, wherein step (c) comprises displaying the ranked offers to a user, and if the user selects an offer, accepting the offer the user selected.

45. The method of claim 35, wherein the ranking in step (c) is determined by using a 5 weighted sum of criteria used by the evaluation rule.

46. A trading network comprising a plurality of nodes, 10 wherein at least one node is a different type of entity than at least one other node; wherein any node participating in the trading network can trade with any other node in the trading network; 15 wherein each node has a set of private, individual trading rules that govern that node's trading behavior; and wherein a first node may send a trading request to at least one second node according to the first node's trading rules, and the at least one second node determines whether and how to respond to the trading request according to the at least one second node's trading rules.

47. The trading network of claim 46, wherein the types of entities include retailers, 20 distributors and manufacturers.

48. The trading network of claim 46, wherein the trading network is integrated with an internal order processing system at each node.

49. The trading network of claim 48, wherein the internal order processing system is an ERP 25 system.

50. The trading network of claim 46, wherein the trading request is a message sent from the first node to the second node.

5 51. The trading network of claim 50, wherein the trading request is a message sent from the first node to the second node over the Internet.

52. The trading network of claim 50, wherein the message is in XML format.

10 53. The trading network of claim 50, wherein the message is encrypted.

54. The trading network of claim 53, wherein the encryption is done using public key cryptography.

15 55. The trading network of claim 55, wherein X.509 digital signatures are used to verify the sending node's identity.

56. The trading network of claim 46, additionally comprising a central repository.

20 57. The trading network of claim 56, wherein the plurality of nodes communicate with the central repository through messages.

58. The trading network of claim 57, wherein a message between a node and the central repository is in XML format.

59. The trading network of claim 56, wherein the central repository stores information about each of the plurality of nodes in the trading network.

60. The trading network of claim 56, wherein the central repository gathers and stores
5 trading performance information.

61. The trading network of claim 60, wherein the stored performance information is used to determine a participating node's scored performance.

10 62. The trading network of claim 56, wherein the central repository stores global rule parameters that a node may use as its own individual rule parameters.

63. A method for a node in a trading network to make a request to at least one other node on the trading network, comprising the steps of:

15 (a) calculating a score for each of a plurality of trading nodes on the trading network using at least one criterion established by the requesting node;

(b) for each of the plurality of trading nodes, determining if the calculated score meets a minimum threshold; and

(c) sending a request from a requesting node to any trading nodes that have a minimum
20 score;

wherein the trading network makes the determination in step (b) and automatically sends the requests to the trading nodes with a minimum score.

64. The method of claim 63, wherein the calculation in step (a) is made by calculating a weighted average.

65. The method of claim 64, wherein the weighted average is calculated using a score for 5 each of the at least one criteria, and a weight for each of the at least one criteria.

66. The method of claim 63, wherein if no calculated scores meet the minimum threshold, the minimum threshold is lowered, and the scores are recalculated.

10 67. A method for a requesting node to rank a plurality of responses to a request sent by the requesting node on a trading network, comprising the steps of:
(a) receiving a plurality of responses;
(b) calculating a score for each of the plurality of responses using at least one criterion established by the requesting node; and
15 (c) ranking the responses according to the calculated score;
wherein the trading network makes the calculation in step (b) and automatically accepts the highest ranked response.